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Real-life events in the virtual world

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Paper

Virtual communities' antecedents and marketing dynamism: An empirical study of tourists visiting Varanasi

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Abstract

The dawn of the age of Web 2.0 technologies has completely transformed interpersonal interactions and communications worldwide. Connectivity, convergence, collaboration and transparency provided by these socio-digital platforms has led to the burgeoning of virtual communities (VCs), the dynamic and vibrant online social universe according unprecedented opportunities for social interactions. Absence of any political, geographical and temporal boundaries has endeared these platforms to 'netizens' worldwide. Tremendous potential offered by Web 2.0 also lured marketers to these platforms where they are experimenting with great success. The increased usage of VCs by customers as well as marketers makes them a fit case to explore the dynamics underlying their adoption and to unearth the marketing implications of the same in Indian perspective. Applying convenience sampling techniques, primary data were collected from tourists visiting various well-known tourist attractions in Varanasi City, Uttar Pradesh, India. Using a survey, 104 responses were collected and subjected to exploratory factor analysis and five factors influencing the espousal of VCs in the Indian context were isolated. It is hoped that the research will be helpful to marketers as it provides insights into the adaptation of VCs as per the customers' requirements and the effective integration of VCs into the marketing strategy. This in turn may help with enhanced customer attention, customer engagement and customer retention.

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Introduction

The dawn of the age of Web 2.0 technologies has completely transformed interpersonal interactions and communications worldwide.¹ Enhanced collaboration, social interaction, personalization, democratization, connectivity and convergence^{1,2} provided by these socio-digital platforms has profoundly affected, modified and reshaped social behaviours and communication behaviours in societies and communities.^{1,2} 'The wisdom

of the crowd' has led to relentless innovations leveraged by technological and information revolutions, bringing in the era of value revolution¹ and to the mushrooming of virtual communities (VCs) and a dynamic and vibrant online social universe that allows individuals to imitate real-life events in the virtual world.^{3,4} Unprecedented opportunities for social interfaces accorded by VCs, without any political or temporal boundaries, has endeared these platforms to 'netizens' worldwide^{2,5} and has become instrumental in the unmatched global growth of these platforms. Eyeing the tremendous potential offered by Web 2.0, marketers, too, have experimented with these platforms in various hues with great success.

Marketing implications in India

The increased usage of VCs by customers as well as businesses makes these a fit case for exploring the factors influencing users' espousal of VCs,⁶ and for finding out the relative importance of various factors and their marketing implications in the Indian context. Present paper, which is based on primary data, is an attempt in this direction by adapting concepts from the extended Technology Acceptance Model (TAM) and Theory of Reasoned Action (TRA). People visiting Varanasi city were contacted, by way of convenience sampling, at prominent tourist attractions of the city and the data were collected by means of a survey instrument, which was analysed utilizing Exploratory Factor Analysis.

Literature review

Defining VCs

Though the existence of VCs for communication, entertainment and information can be traced back to the 1980s,^{4,7} the affordability and easy accessibility of the necessary technology have made these commonplace.⁷ Rheingold⁴ defined VCs as *the social aggregations that emerge from the Net when enough people carry on public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace*. Porter⁸ defines a VC as *an aggregation of individuals or business partners who interact around a shared interest, where the interaction is at least partially supported and/or mediated by technology and guided by some protocols or norms*.

VCs outgrow other online activities

VCs are based on amount of interpersonal interaction, the extent of subject coverage and a desire to escape reality. Membership across 16 VCs in excess of 100 million (en.wikipedia.org) demonstrates that people's participation in VCs has already surpassed³ and will continue to outshine other online activities.⁹ In addition, apart from the communities of relationships, communities of fantasy and communities of interest, communities of transactions have proliferated as envisaged by Armstrong *et al.*⁷ Evolution from one form of community to another and amalgamation of interests is widespread⁷ as people use VCs to fulfil social as well as economic goals.⁴ Activities carried out by individuals on VCs encompass a wide range, from buying to selling, to information exchange and acquisition, to developing and maintaining social relations and to exploring new identities, to entertainment.^{4,7}

New opportunities for business

All this has brought new opportunities to businesses¹ to utilize VCs to increase sales,¹⁰ (as cited in Porter, 2004) for product support and service delivery,⁷ for positive word-of-mouth,¹¹ for electronic word-of-mouth

(e-WOM),¹² for Customer Relationship Management¹³ and for dissemination of marketing information,¹⁴ to name a few. However, this has also posed threats to current business models and hence VCs deserve attention⁵ for exploration of the factors influencing users' espousal of these platforms and for finding out the relative importance of the various factors and their marketing implications in the Indian context.

Models of technology acceptance

To comprehend the how and why of the adoption of new information technologies, researchers have propounded various technology acceptance models ranging from the TRA,^{15,16} TAM,¹⁷ TAM2,¹⁸ Motivational Model (MM),¹⁹ Theory of Planned Behavior (TPB), Decomposed Theory of Planned Behavior (DTPB) and Combined TAM and TPB (C-TAM-TPB),²⁰ Model of PC Utilization (MPCU),²¹ Innovation Diffusion Theory (IDT),²² and Social Cognitive Theory (SCT).²³ Using different constructs, borrowed from information systems, psychology and sociology, as independent variables, and use intention or usage as a dependent variable, these models have tried to explain the individual users' adoption of new technologies in organizational settings.^{18,19,23,24,25}

Combining concepts from TRA and TAM

As VCs are social as well as technical platforms, researchers proposed to use the constructs from both — information technology and social psychology — disciplines to gain a better and realistic comprehension of the adoption of VCs in Indian perspective. Hence, the concepts were borrowed and adapted from TRA and TAM in order to mitigate the shortcomings of both the models, as TRA is criticized for being a weak predictor of new technology adoption²⁶ and TAM has been criticized for its disregard of human and social change variables. Thus, the researchers have adapted the three core constructs — Behavioural Intention (BI), Attitude (A) and Subjective Norm (SN) — from TRA^{15,16} along with the core constructs of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) from TAM¹⁷ for the present study. Though both TRA and TAM have been successfully employed in diverse situations to explain the technology adoption behaviour of individuals,^{26,27} studies explaining the adoption of VCs in the Indian context are sparse, thus establishing the need for the present study.

Objectives

- To explore the underlying factors influencing users' espousal of VCs in the Indian context.
- To ascertain the relative importance of the various factors in the Indian context.
- To discern the marketing implications of those factors in the Indian context.

Methodology

Developing the survey

This study is based on both primary and secondary data. Secondary literature, mainly various research papers published in journals, other proprietary data available at their websites and relevant books, were used

to identify the research gap and for the development of the customized scale for primary data collection. The instrument for primary data collection was a simply worded questionnaire comprising a five- point Likert scale (with 1 for Strongly Agree and 5 for Strongly Disagree). The questionnaire was duly revised after carrying out a pilot for content, sequence and wording. Various items, validated from prior research and modified to suit the present study,^{17,19,24,26,28} used in the final draft of the questionnaire have been reproduced below:

Perceived Usefulness (PU)

I find VCs useful for information acquisition.
I find VCs useful for information exchange.
I find VCs useful for relationship development.
I find VCs useful for relationship maintenance.
I find VCs useful for social and emotional support.
I find VCs useful for entertainment.

Perceived Ease of Use (PEOU)

I find VCs easy to use.
My interaction with VCs is clear and understandable.
It is easy for me to become skillful at using VCs.
It is easy to navigate through VCs.

Attitude towards VCs (ATT)

Using VCs is a good idea.
Actual process of using VCs is pleasant.
Working with the VCs is fun.
I like using VCs.
I find using VCs to be enjoyable.
I find using VCs interesting.

Subjective Norms (SN)

People who influence my behaviour think that I should use VCs.
People who are important to me think that I should use VCs.

Behavioural Intention to use the system (BI)

BI1: I intend to use the VCs in the near future.
BI2: I predict that I will use VCs as soon as possible.
BI3: I will regularly use VCs in future.

Definitions and examples

For easy comprehension of the term ‘virtual communities’, suitable and most prevalent examples (viz. Facebook, LinkedIn, Google+, Skype, Twitter, Instagram, Tumblr, Dropbox, etc) were given to the respondents along with a simply worded definition of the term. Convenience sampling was used for respondent selection and data were collected by means of a survey instrument from Indian tourists visiting Varanasi City, Uttar Pradesh, India. These tourists were intercepted at various prominent tourist destinations in Varanasi, such as Assi and Dashashawmedh Ghats

at the Ganges River, Kashi Viswanath Temple and Durga Temple. The researchers noted down the responses based on answers given by the respondents.

Driving better customer experience

Exploratory Factor Analysis was used to analyse the data to find out what features should be included in VCs in order to make these more attractive to users so that usage results in a better customer experience, leading to enhanced customer satisfaction and increased loyalty.

Reliability testing of scale items

Data analysis

The value of the Cronbach's α 0.933 for 21 total items indicated that the scale was highly reliable. The item-wise reliability of the scale was also checked and it was found that removal of items would result in a decrease of the reliability of the scale. Cronbach's α 's were 0.780 for six items of PU, 0.846 for four items of PEOU, 0.914 for six items of Attitude towards VCs (ATT), 0.859 for two items of SN and 0.880 for three items of Behavioural Intention to use the system (BI) (Table 1).

Basic sample analysis

Out of the total 118 responses, only 104 were used for final analysis as the remaining 14 were not using VCs and were thus excluded from the final analysis. Out of these remaining 104 respondents, 54 per cent were male and 46 per cent were female. Of the total respondents, 37 per cent were in the 24–29-year-old age group, followed by 26 per cent in the age group 18–24, indicating the young generation's dominance on these platforms. A surprising element was the 19 per cent of respondents in the age group of 39–44 years. Forty-seven per cent of the respondents were postgraduates, followed by 29 per cent who were graduates — 31 per cent of total users were students, closely followed by people working in lower and middle positions in the private sector (both having a total of 32 per cent). Sixty-three per cent of the respondents fell in the income brackets of less than a lakh, 2–5 lakhs, and 5–8 lakhs. Youth dominance in the Indian context is asserted by income profile, profession profile and education profile of the respondents. Among 77 per cent of respondents internet was being used up to 7 h per day and 91 per cent were engrossed with VCs up to 7 h per day.

Result of Exploratory Factor Analysis

The Kaiser-Meyer-Olkin (KMO) test of sampling adequacy and Bartlett's test of sphericity indicated the data to be suitable for Exploratory Factor Analysis (Table 2).

Table 1: Survey scale reliability

Reliability Statistics		
	Cronbach's Alpha	N of Items
Entire Scale	0.933	21
PU	0.780	6
PEOU	0.846	4
ATT	0.914	6
SN	0.859	2
BI	0.880	3

Table 2: Validity of results for Exploratory Factor Analysis

KMO and Bartlett's Test		
<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</i>		0.874
Bartlett's Test of Sphericity	Approx. Chi-Square	1435.821
	Df	210
	Sig.	0.000

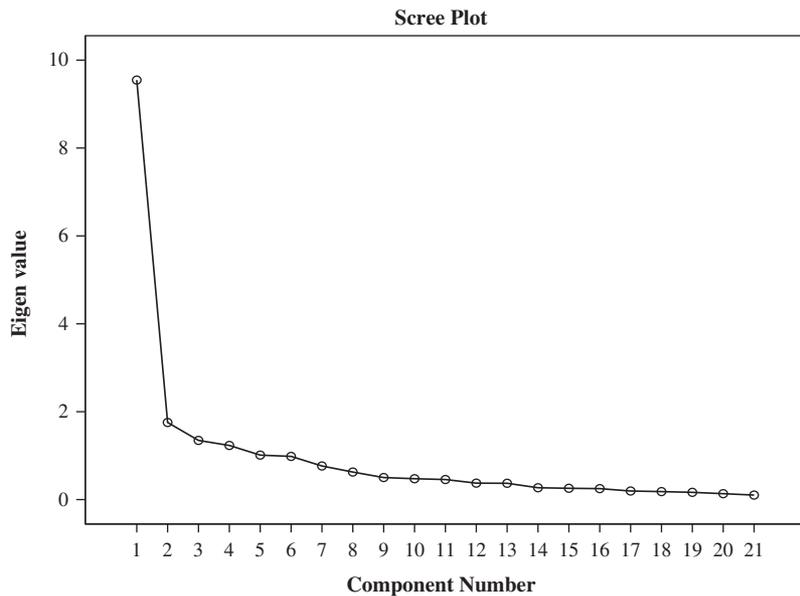


Figure 1: Scree plot for number of factors in survey

Determining factors for model

Principal Component Analysis as Extraction Method and Varimax Rotation Method with Kaiser Normalization technique were used for factor analysis. The number of factors was determined using Eigen value greater than 1 and a Scree plot for the emerged model was also plotted (see Figure 1). Factor analysis, given in Table 3, resulted in five factors that were called Intent & Stance, Delightful Ease, Kinship Encouragement, Gregariousness and Information Accession in order of importance.

The five factors that emerged from the analysis have been summarized in Figure 2

Positive feelings drive repeat behaviour

Marketing implications

The most important factor, as per the analysis, is Intent & Stance of the individual towards VCs. Attitude towards usage of a particular technology, along with BI, are two important aspects leading to a particular behaviour.²⁹ The positive or negative evaluations of a particular behaviour have an impact on intention and usage behaviour³⁰ — positive feelings towards a particular behaviour are an especially good indicator of continuation and repetition of the behaviour under consideration.³¹

Although the role of attitude towards intention to use and actual usage is dubious — some researchers have indicated modest or insignificant impact of attitude towards usage in predicting technology acceptance^{32,33} — the

Table 3: Factor analysis outputs

Summary of Factor Analysis Output ^a						
	Factors					Communalities
	1	2	3	4	5	
Using the virtual communities is a good idea.	0.771					0.735
I like using VC.	0.771					0.777
I predict to use VC as soon as possible.	0.768					0.695
I intend to use the Virtual Communities in the near future.	0.732					0.757
I will regularly use VC in future.	0.728					0.665
I find using VC interesting.	0.688					0.756
Actual process of using VC is pleasant.	0.646					0.691
Working with the VC is fun.	0.607					0.637
I find VC useful for entertainment.		0.713				0.659
I find VC easy to use.		0.697				0.625
My interaction with VC is clear and understandable.		0.690				0.754
I find using VC to be enjoyable.		0.630				0.709
It is easy to navigate through VC.		0.616				0.637
It is easy for me to become skillful at using VC.		0.582				0.650
I find VC useful for relationship maintenance.			0.809			0.751
I find VC useful for relationship development.			0.598			0.634
I find VC useful for social and emotional support.						0.438
People who influence my behavior think that I should use VC.				0.898		0.850
People who are important to me think that I should use the VC.				0.834		0.841
I find VC useful for information acquisition.					0.835	0.801
I find VC useful for information exchange.					0.787	0.830
Eigen values	9.546	1.755	1.347	1.232	1.012	
% of Variance Explained	45.46	8.36	6.41	5.86	4.82	
Cumulative % of Variance Explained	45.46	53.82	60.23	66.09	70.91	

^aRotation converged in 8 iterations.
 Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

attitude has been found to be a determinant of behaviour intention in the post-implementation stage.^{32,33}

Attitude does not always drive usage

Researchers have found users employing a technology even when their attitude is found to be negative if the technology was perceived to be useful or easy to use.²⁹ On the other hand, researchers have also found people not using a technology even when the attitude towards use was positive and intentions to use the technology were exhibited by the respondents.³⁴ Nevertheless, a positive attitude will encourage people to repeat the behaviour, for example, positive attitude towards a website will encourage people to revisit the website.³⁵

Marketers should accentuate the positive

As the attitudes of VC users are important in predicting intention to use and in turn usage behaviour, the need and importance of cultivating and managing those users' attitudes for successful and faster adoption of VC is accentuated.³⁴ Marketers should focus on developing strategies such as establishing trust, providing user-friendly interfaces and increasing usefulness that inculcate positive attitudes in users towards VCs and thereby increase participation and use.³⁵ Another implication is that

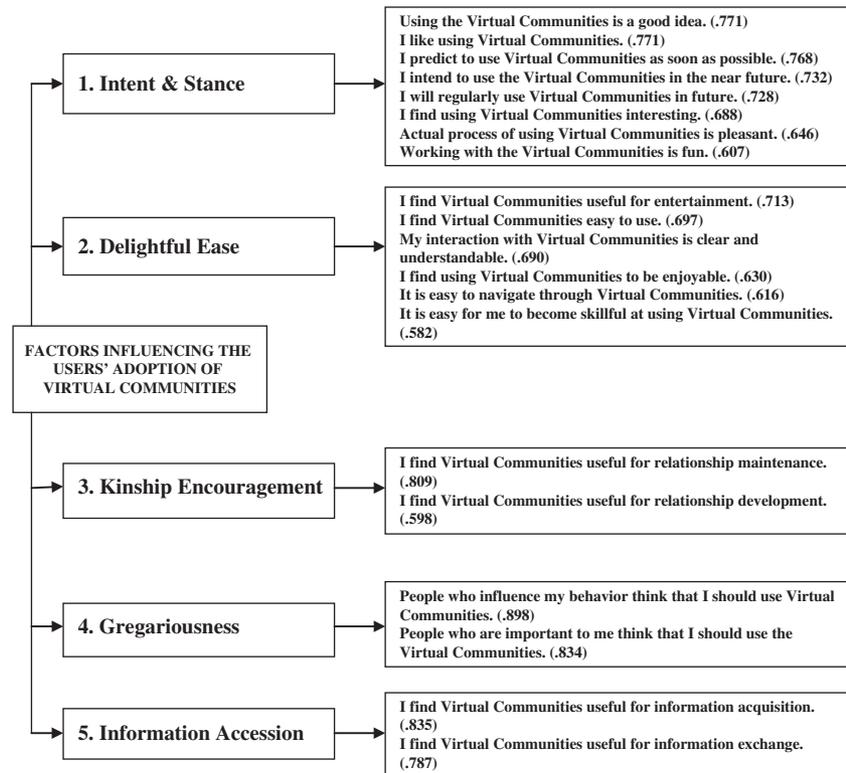


Figure 2: Five factors used in the model

marketers should find out the attitudes of people towards various available VC platforms and then market products and services only on those VCs towards which people have a positive attitude. This is because the likelihood of people visiting these platforms will be relatively high. Moreover, as per the congruity theory of attitudes, changes in the evaluation of a source and a concept can be linked together by an associative assertion.³⁶ This may result in a positive attitude towards the products and services that have been advertised through these VCs.³⁴ However, there is not only a need to change peoples' attitude towards the VC, but maintenance of that positive attitude is also required to improve users' acceptance of VCs.^{37,38} This can be achieved by improving motivation, skills, experience, mood states, communication and education.³⁸

Participation rises with ease of use

The second factor affecting individuals in the Indian context was called Delightful Ease, as most of the items indicated the preference of users for ease of operation alongside elements of ecstasy. Thus, digital marketing companies and marketers should take particular note of this and should facilitate ease of operation and navigation for users of these socio-digital platforms through user-friendly interfaces. Removal of impediments will ensure enhanced participation. Wikipedia's modus operandi to enhance participation is to acknowledge each comment by participants as social recognition and social rewards are vital in social settings.³⁹ Marketers should also assist 'anytime, anywhere' access, which can be done by developing freely and easily downloadable mobile applications since mobile can provide instantaneous in-depth product information.⁴⁰

**Informative,
entertaining content**

The word Delightful connotes ecstasy, joy and happiness, which users want to derive when getting engaged and involved with these communities. As such, it implies that marketers should try to provide content that is informative, yet entertaining — fulfilling organizational objectives, yet evoking fun. As people like to use VCs for their pleasure quotient, marketers should increase customer engagement through engrossing messages that mesmerise customers, let customers be involved and let them be a part of the message (like customers being motivated to upload homemade commercials to YouTube) — messages that customers value and can connect with.⁴¹

**Focus on providing
content**

Organizations should think 'out of the box' and, instead of 30-s or 60-s commercials, should concentrate on providing content that evokes discussions,^{2,40} for example some cultural association of the brand⁴⁰ or association with some events² as principles of narrowcasting. 'Sense and respond' marketing and mass customization are followed by VCs.⁴² Hence, placing relevant content in VCs is fundamental to customer engagement *vis-à-vis* traditional media.⁴¹

**Immersive brand
stories**

As these are youth-dominated platforms, the idea of fun should be aligned to youth. Moreover, the proliferation of mobile internet has enabled marketers to tap hitherto inaccessible young, tech-savvy consumers (both rural and urban) with high disposable incomes.⁴¹ Development of freely downloadable, user-friendly mobile apps to access VCs may prove more beneficial in this regard. By creating media synergy across multiple screens, marketers can take advantage of VCs to narrate immersive brand stories by means of a personal, customizable, consumer-powered experience, as already done successfully by H&M, Century 21 and GE in the US.⁴⁰

**Customer service and
support platforms**

The third factor, viz Kinship Encouragement, opens another window for marketers. People leverage the technology underlying VCs to fulfil their social needs: the need for developing and nurturing strong and weak social ties, since the most important aspect of social media is 'social', not 'media'.⁴¹ As people seek emotional and social support through these media, it gives an opportunity to marketers to use these techno-social platforms as customer service and support platforms. Opportunities for marketers also lie in nurturing relationships with people and making friends with them² through VCs and thereby increasing their chances of being considered in a positive light by these 'Friend-Customers'. Sometimes customers may become brand fans, which is a self-proclaimed involvement with a brand.⁴³ Such customers are not only loyal, but also have the potential to turn into strong brand advocates⁴⁴ after passing through successive stages of social media engagement, viz interaction, intimacy and influence.⁴⁵ Organizations can assign identifiable staff to VCs to converse with customers, to provide them with product information, to solve their problems, to redress their grievances, to update them or at least to apologize in case of any product or service failure.

**Introducing brands into
conversations**

The fourth factor, Gregariousness, conveys the social sway of VCs over users. People use social media to discuss products with their friends before purchase, which can be used by marketers as a point of influence and can then convert these simple conversations into product information portals.

These can be further effectively used to give the customer an enhanced brand experience, turning him/her into a satisfied and loyal customer.⁴⁰ Marketers can also use VCs as powerful e-WOM platforms with the potential to influence people's opinions and attitudes. VCs have transformed both the size and speed of these influences because of their inherent structure and have become an additional parameter to take care of while calculating the customer lifetime value (CLV).⁴³ Therefore, the strategy for practitioners is to be on the look-out for such social influencers and turn them into brand advocates.⁴⁰

Following customers' footprints

The fifth factor, Information Accession, encompasses information exchange and information acquisition. The fact that people use VCs for information exchange and information acquisition is both an opportunity and a threat to marketers. It is an opportunity in the sense that internet users leave their footprints behind.¹ These footprints serve as a tremendous source of unfiltered, unbiased and detailed customer feedback and behavioural data that enriches organizations with a sound understanding of customers and enables them to come up with an improved marketing mix.^{1,2}

Dove viral video

This information exchange is a threat as products and services marketed by organizations are being talked about on the VCs (good or bad) without any intervention, effort or control by organizations.^{41,46} Dove's 'Evolution' viral video is a case in point, as it proved beyond doubt that people like to talk about the product or brand both offline and online. In addition, the audience's brand engagement in online environments is greater in comparison to offline environments.^{1,41}

Impact on customer values

Another advantage offered by social media is the accessibility of 'head and tail content', that is, the availability of expert opinions and user-generated content in one place, consequent to which a more highly engaged audience is attracted to these platforms.⁴¹ This results in connected customer lifetime value (CCLV), enhanced CLV, which is the result of the addition of traditional customers' referral value (CRV), and customer social media value.⁴³ The collective wisdom based on expert and peer opinions influences and alters people's opinions and attitudes,^{40,43} and there is therefore a need to manage the conversations taking place in VCs effectively in order to nurture and cultivate lasting, meaningful connections over time with the audience.

Limitations, suggestions and conclusions

Other variables that impact behaviour

This study has certain limitations, such as not carrying out confirmatory factor analysis of the emerged factors, further testing and validation of adapted scales, small sample, self-reporting bias and repeat responses. Future studies can take a clue from here and try to eradicate some of these limitations. Future studies may also include security, risk, trust and confidentiality-related variables that have been shown to have an impact on online consumer behaviour, but were not included in the present study. In addition, path analysis can be done to explore the interrelationship between the emerged factors.

Deriving more value from VCs

By revealing the underlying factors affecting the espousal of VCs, this research can help marketers by providing insights for the effective integration of VCs in their marketing strategy. In order to derive more value from the usage of VCs, marketers should ensure that VCs facilitate ease of navigation; that their marketing and other information being broadcasted is unique, entertaining and attention grabbing; and that VCs support customer relationship development and maintenance of customer relations, and should provide customers with relevant, timely and updated products and services-related information.

Tapping the cognitive surplus

This dissemination of relevant, updated and timely information to customers in a non-pedantic and less intrusive manner will help them to make informed decisions. This, in turn, will result in better customer experience, enhanced customer satisfaction and increased loyalty, leading to more customers paying frequent visits to these platforms. Consequently, unfiltered customer feedback and behavioural data will be available to marketers, which will help in tapping the 'cognitive surplus' of society and guide organizations to improve their marketing mix.

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